

**REMARKS**

**Dynamic Mapping Information**

Applicant is claiming dynamic maps of wireless networks and methods of locating a service-providing device of a wireless network from a service-requesting device of the wireless network utilizing dynamic mapping information. Applicant has expressly defined mapping information to be physical network mapping or physical network mapping combined with logical network mapping. Specification, paragraph 0005. Physical network mapping can provide information regarding the location of a service-providing device relative to a service-requesting device. Dynamic mapping information accommodates mobile or other transient devices of the wireless network, and especially user devices, facilitating location or identification of a desired service-providing device in an unfamiliar network or surrounding. *Id.*

Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. MPEP § 2111.01(III) (citing Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999)). Applicant thus contends that to read on Applicant's mapping information, the cited reference must provide physical network mapping in a form that is useful, concrete and tangible. This contention is further supported by limitations of independent claims 1 and 15 as to relative proximity or distance and direction; distinctly physical characteristics.

The sole reference used in support of the rejections, Ogier et al., relates to logical mapping techniques. *See, e.g.*, Ogier et al., column 9, lines 1-14. Applicant has expressly distinguished its physical network mapping from logical network mapping. *See*, Specification, paragraph 0020. Although some distance or directional information might be inferable from the systems of Ogier et al. at the point in time when a device crosses from one subnet to another, because Ogier et al. is not concerned with physical location of its devices, there is no teaching or suggestion that such physical location is actually inferred. Furthermore, while a device remains in a single subnet, only its logical connections are discernable. And Ogier et al. is silent about presenting physical network mapping to a user in a useful, concrete and tangible form. As such, Applicant contends that Ogier et al. is incapable of teaching or suggesting each and every limitation of Applicant's claims.

*Claim Rejections Under 35 U.S.C. § 101*

Claims 1-20 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully traverses.

**Claims 1-14**

Applicant has amended claim 1 to recite, in part, “wherein the representations comprise visual, audible and/or tactile indicators.” Applicant contends that this amendment is supported by the Specification as originally filed at least at paragraph 0055. Applicant further contends that the amendment makes clear that Applicant is claiming a manufacture in that the dynamic map as claimed in Applicant’s claim 1 contains representations in a useful, concrete and tangible form. Thus, the representations of claim 1 are not mere data structures, *per se*, but data that has been transformed into a representation that has a practical application in the technological arts. Thus, Applicant contends that claim 1 meets the requirements of 35 U.S.C. § 101. *See also*, MPEP § 2106(IV)(B)(2)(a). As claims 2-14 include all patentable limitations of claim 1, Applicant believes they also meet the statutory requirements.

Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 101, and allowance of claims 1-14.

**Claims 15-20**

Claim 15 recites, in part, “providing an indication of a distance and a direction to the service-providing device from the service-requesting device using the dynamic mapping information.” Applicant contends that the act of providing an indication of a distance and a direction to the service-providing device from the service-requesting device is a manipulation of data representing physical objects that satisfies the safe harbor provisions of MPEP § 2106(IV)(B)(2)(b) by providing a real world value of assisting a user in locating the service-providing device. Thus, Applicant contends that claim 15 meets the requirements of 35 U.S.C. § 101. As claims 16-20 include all patentable limitations of claim 15, Applicant believes they also meet the statutory requirements. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 101, and allowance of claims 15-20.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-20 were rejected under 35 U.S.C. § 102(e) as being unpatentable over Ogier et al. (U.S. Patent No. 6,845,091). Applicant respectfully traverses.

Claim 1 is amended to recite, in part, “wherein the representations provide an indication of at least a relative proximity between their respective network device and the reference point.” Claim 15 recites, in part, “providing an indication of a distance and a direction to the service-providing device from the service-requesting device using the dynamic mapping information.” Applicant contends that at least these limitations are neither taught nor suggested by the cited reference.

As previously noted, Ogier et al. does not teach or suggest physical network mapping. Applicant has carefully reviewed the Ogier et al. reference and can find no reference to determining relative proximity of its devices in a physical sense or determining distance and direction between its devices. The Office Action asserts that in selecting a next node on a route to a destination, direction and distance between a service-requesting device and a service providing device is inherently indicated. Office Action, page 11, first paragraph. Applicant contends that the Examiner is taking official notice of facts outside the record in that routing nodes of Ogier et al. select next nodes based on logical connectivity and, thus, physical location of that node need not be known. In accordance with MPEP § 2144.03, Applicant respectfully requests that the Examiner provide a reference or convincing line of reasoning supporting the assertion that distance and direction information are inherently indicated when, in forwarding data packets to a destination node, a routing node of Ogier et al. selects a next node on a route to the destination. Absent such a reference or line of reasoning, Applicant contends that the Examiner cannot rely on this contention in support of any rejection.

In addition, Applicant contends that a rejection based on inherency cannot be sustained as it is clear from the cited reference that no knowledge of physical location need be known to effect its methods. *See*, MPEP § 2112 ("In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)).

In view of the foregoing, Applicant contends that claims 1 and 15 are patentably distinct from the cited reference. As claims 2-14 include all patentable limitations of claim 1,

**REPLY UNDER 37 CFR 1.116 –**

**EXPEDITED PROCEDURE – TECHNOLOGY CENTER 2100**

Serial No. 10/015,097

Title: DYNAMIC MAPPING OF WIRELESS NETWORK DEVICES

**PAGE 9**

Attorney Docket No. 10012346-1

and claims 16-20 include all patentable limitations of claim 15, Applicant believes these claims are also allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e), and allowance of claims 1-20.

**CONCLUSION**

In view of the above remarks, Applicant respectfully submits that the claims are in condition for allowance and requests reconsideration of the application and allowance of the claims.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2204.

Respectfully submitted,

Date:

11 Aug 05

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